HOLLIER Appl. No. 09/701,514 August 8, 2003

#### AMENDMENTS TO THE SPECIFICATION:

Please insert on page 1, before the paragraph beginning on line 3, the following centered subheading:

# 02

#### FIELD OF THE INVENTION

Please insert on page 1, before the paragraph beginning on line 8, the following centered subheading:

## <u>0.3</u>

#### **BACKGROUND OF THE INVENTION**

Please insert on page 2, before the paragraph beginning on line 27, the following centered subheading:

#### **SUMMARY OF THE INVENTION**

Please amend the paragraph beginning at page 4, line 14, as follows:

A further application of the invention is in the real-time generation of audio-visual events in virtual environments, in particular real-time optimisation of synthetic people such as animated talking faces. The process may be used in particular for the matching of synthetic head visemes (mouth shape) transitions with the acoustic waveform data generating the speech to be represented, thereby generating <u>moreore</u> realistic avatars.

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Please insert on page 4, before the paragraph beginning on line 20, the following centered subheading:



### **BRIEF DESCRIPTION OF THE DRAWINGS**

Please insert on page 4, before the paragraph beginning on line 30, the following centered subheading:

#### **DETAILED DESCRIPTION OF THE INVENTION**

Please amend the paragraph beginning at page 6, line 3, as follows:

One key component of the multi-model of the present invention is synchronisation. This part of the model is shown in Figure 2. The degree of synchronisation between the inputs is determined in a synchronisation measurement unit 38. This takes inputs from the visual sensory layer (input 38v) and the audible sensory layer (input 38a) relating to the respective delays in the two signals. The synchronisation measurement unit 38 determines the difference in these two delays and generates an output 38s38v representative of the relative delay between the two signals. This, rather than the absolute delay in either signal, is the perceptually significant. Such lack of synchronisation has been determined in prior art systems but, as will be discussed, the perceptual importance of such synchronisation errors varies according to the nature of the stimulus.

